

# AEM EL 4.1

## Air Cooled AC



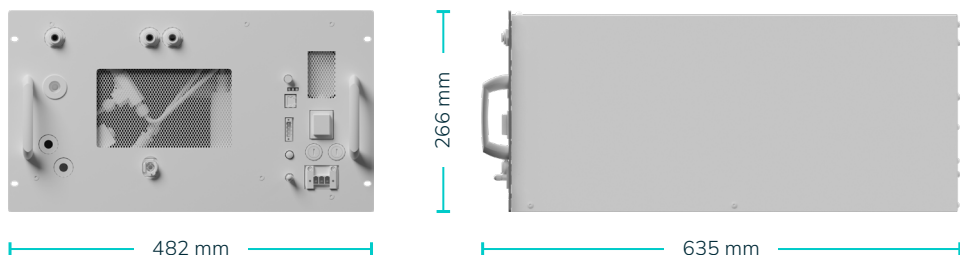
Enapter's patented anion exchange membrane (AEM) electrolyzer is a standardised, stackable and flexible system to produce on-site hydrogen. The modular design – paired with advanced software integration – allows set up in minutes and remote control and management. Stack this electrolyzer to achieve the required hydrogen flowrate.



AEM Electrolyzer EL 4.1  
[www.enapter.com/aem-electrolyser](http://www.enapter.com/aem-electrolyser)

# Specifications

Enapter AEM Electrolyzer  
EL 4.1 Air Cooled AC



<b>Production rate</b>	Up to 500 NL/h, up to 1.0785 kg/24 h	
<b>Hydrogen output purity</b>	35 barg (508 psig): 99.9% (< 1,000 ppm H <sub>2</sub> O and < 5 ppm O <sub>2</sub> ) at 25 °C (77 °F) 8 barg (116 psig): 98.8% (< 12,000 ppm H <sub>2</sub> O and < 5 ppm O <sub>2</sub> ) at 25 °C (77 °F)	
<b>Output pressure</b>	Up to 35 barg (Up to 507.63 psig)	
<b>Nominal power consumption per Nm<sup>3</sup> of H<sub>2</sub> produced</b>	4.8 kWh/Nm <sup>3</sup> , beginning of life	
<b>Operative power consumption</b>	2.4 kW, beginning of life	
<b>Heat dissipation</b>	0.6 kW, beginning of life	
<b>Standby power consumption<sup>1</sup></b>	0.03 kW	
<b>Power supply</b>	208 – 240 V (AC), 50/60 Hz, both split phase and 3-phase	
<b>H<sub>2</sub>O inlet purity (recommended)</b>	Type II Water Acidity < 0.1 meq/l	According to ASTM D193-06 According to ASTM D1067
<b>Water consumption</b>	~ 420 mL/h at 25 °C (~ 0.11 gal/h at 77 °F)	
<b>Water input pressure range</b>	1 – 4 barg (14.5 – 58 psig)	
<b>Ambient operative temperature range</b>	5 °C – 45 °C (41 °F – 113 °F)	
<b>Ambient operative humidity range</b>	Up to 90% humidity, non-condensing	
<b>IP rating</b>	IP 20	
<b>Dimensions</b>	W/D/H: 482 mm × 635 mm × 266 mm (19" × 25" × 10.5")	
<b>Weight</b>	42 kg (92.6 lbs)	
<b>Space inside cabinet</b>	6 U	
<b>Control and monitoring</b>	Fully automatic with Enapter's EMS via 2.4 GHz Wi-Fi and Bluetooth, Modbus TCP over Ethernet	
<b>Conformity</b>	CE mark according to the machine directive 2006/42/CE <sup>3</sup> UKCA mark according to Supply Machinery (Safety) Regulations 2008 <sup>4</sup> CSA/ANSI B22734:2023 Ed.1 Hydrogen Generators Using Water Electrolysis - Industrial, Commercial, and Residential Applications <sup>5</sup>	

<sup>1</sup> Standby refers to the condition in which no hydrogen is being produced and the auxiliary components are not powered.

<sup>2</sup> Please, check the Battery limits and the Owner's Manual for the complete requirements list

<sup>3</sup> The Electrolyzer belongs to S.E.P. category according to Pressure Equipment Directive 2014/68/EU

<sup>4</sup> The Electrolyzer belongs to S.E.P. category according to Pressure Equipment (Safety) Regulations 2016

<sup>5</sup> ETL recognized electrolyzer versions only (ELE410535A2AE, ELE410535A2LE)

Note: The product is under continuous improvement and the technical specifications might be subject to change. Please make sure to refer to our website for the most recent specifications.



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# AEM EL 4.1

## Liquid Cooled AC



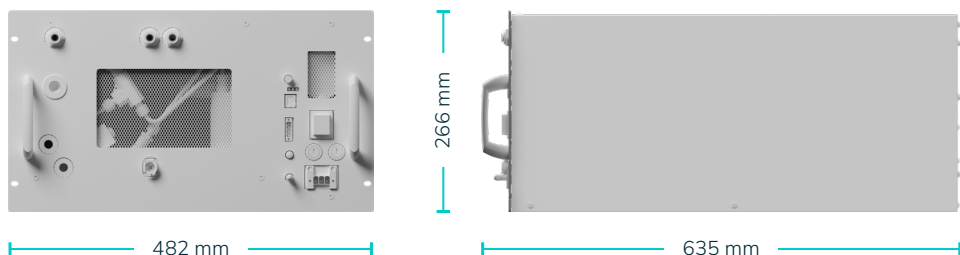
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# Specifications

## Enapter AEM Electrolyzer EL 4.1 Liquid Cooled AC



<b>Production rate</b>	Up to 500 NL/h, up to 1.0785 kg/24 h
<b>Hydrogen output purity</b>	35 barg (508 psig): 99.9% (< 1,000 ppm H <sub>2</sub> O and < 5 ppm O <sub>2</sub> ) at 25 °C (77 °F) 8 barg (116 psig): 98.8% (< 12,000 ppm H <sub>2</sub> O and < 5 ppm O <sub>2</sub> ) at 25 °C (77 °F)
<b>Output pressure</b>	Up to 35 barg (Up to 507.63 psig)
<b>Nominal power consumption per Nm<sup>3</sup> of H<sub>2</sub> produced</b>	4.8 kWh/Nm <sup>3</sup> , beginning of life
<b>Operative power consumption</b>	2.4 kW, beginning of life
<b>Heat dissipation</b>	0.6 kW, beginning of life
<b>Standby power consumption<sup>1</sup></b>	0.03 kW
<b>Power supply</b>	208 – 240 V (AC), 50/60 Hz, both split phase and 3-phase
<b>Maximum water input conductivity</b>	Minimum ASTM D1193-06 Type IV or recommended Type II or Type III <sup>2</sup>
<b>Water consumption</b>	~ 420 mL/h at 25 °C (~ 0.11 gal/h at 77 °F)
<b>Water input pressure range</b>	1 – 4 barg (14.5 – 58 psig)
<b>Cooling water pressure range</b>	1 – 4 barg (14.5 – 58 psig)
<b>Cooling water temperature range</b>	5 °C – 40 °C (41 °F – 104 °F) <sup>3</sup>
<b>Cooling water flow</b>	1 – 2 L/min (0.26 – 0.53 gal/min)
<b>Ambient operative temperature range</b>	5 °C – 45 °C (41 °F – 113 °F)
<b>Ambient operative humidity range</b>	Up to 90% humidity, non-condensing
<b>IP rating</b>	IP 20
<b>Dimensions</b>	W/D/H: 482 mm × 635 mm × 266 mm (19" × 25" × 10.5")
<b>Weight</b>	41 kg (90.4 lbs)
<b>Space inside cabinet</b>	6 U
<b>Control and monitoring</b>	Fully automatic with Enapter's EMS via 2.4 GHz Wi-Fi and Bluetooth, Modbus TCP over Ethernet
<b>Conformity</b>	CE mark according to the machine directive 2006/42/CE <sup>4</sup> UKCA mark according to Supply Machinery (Safety) Regulations 2008 <sup>5</sup> CSA/ANSI B22734:2023 Ed.1 Hydrogen Generators Using Water Electrolysis - Industrial, Commercial, and Residential Applications <sup>6</sup>

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<sup>3</sup> Please, check the Owner's Manual for operational values

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